Application No.: 10/531,152 2 Docket No.: 562492004000

Response to Non-Final Office Action of 1/5/2009

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0039] with the following amended paragraph:

[0039] As will be explained in greater detail below, the transmitter architecture 100 incorporates digital pre-equalisation utilising the present invention. The transmit architecture 100 includes a transmit filter section 110, a digital pre-equaliser section 120, a digital-to-analog converter (DAC) section 130, a transmitter section 140, and a post-conversion RF single channel filter section 150. I (In-phase) and Q (Quadrature-phase) components of a modulated transmit signal are applied to respective root-raised-cosine (RRC) filters 112 and 114 in the transmit filter section 110; the RRC filters 112 and 114 have real filter coefficients. The outputs of the RRC filters 112 and 114 are applied to a series arrangement of first FIR (Finite Impulse Response) digital filter 122 and a second FIR digital filter 124; the FIR digital filters 122 and 124, which have complex filter coefficients, will be described in greater detail below. The I and O outputs from the second FIR digital filter 124 are applied to respective digital to analog analog to digital filters 132 and 134. The outputs of the DAC [[ADC]] converters 132 and 134 are applied to a transmit up-converter 142 to produce a single transmit output signal of upwardly-translated frequency. The output of the transmit upconverter 142 is applied to an RF single-channel filter 152, to produce an accurate and highly bandlimited transmit output signal T.